

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

June 8, 2005

TO: Internal File

THRU: D. Wayne Hedberg, Permit Supervisor

FROM: James D. Smith, Environmental Specialist

RE: Escarpment Failure, CO-OP Mining Company, Bear Canyon Mine, C/015/0025, Task ID #2173

SUMMARY:

This amendment simply extends the projection of subsidence caused by mining in the Blind Canyon Seam into an area where C.O.P. Coal Development Company is the owner of the surface land (Plate 2-2). C.O.P. owns the underlying coal (Plate 2-3), which is mined by CO-OP under a lease agreement. This area includes an escarpment on C.O.P land that was previously to be protected from subsidence.

TECHNICAL MEMO

TECHNICAL ANALYSIS:

OPERATION PLAN

SUBSIDENCE CONTROL PLAN

Regulatory Reference: 30 CFR 784.20, 817.121, 817.122; R645-301-521, -301-525, -301-724.

Analysis:

Subsidence Control Plan

- Plate 3-4A shows the underground workings and the potential subsidence zone for the Blind Canyon Seam (lower) and Plate 3-4C shows this information for the Tank Seam (upper); these plates do not show surface features.
- Plate 3-3 shows topography. Also marked are potential subsidence zones and locations of escarpments that can potentially be impacted by subsidence. The potential subsidence zones include an area in Section 30, on land owned by C.O.P. Coal Development Company on the east side of Bear Canyon, that is not shown on Plates 3-4A and 3-4C. This area includes an escarpment previously shown outside the potential subsidence zone.
- The February 11, 2005 cover letter specifies that the escarpment is to be in the potential subsidence zone.
- The potential subsidence zones on Plates 3-4A and 3-4C do not match the potential subsidence zone on Plate 3-3, particularly in the new area of potential subsidence in Section 30, on the east side of Bear Canyon. Plate 3-4C specifies that pillars will be left in this area to protect escarpments.
- Barrier pillars will be left where required by lease stipulations or for protection of entries, streams, or wildlife and to minimize the possibility of escarpment failure and resulting impacts to water or nesting raptors. No retreat mining will be done under these areas, which are outside the potential subsidence zones shown on Plate 3-3 (Section 3.4.2.3).

Findings:

Information provided in the application is not adequate to meet the requirements of the Utah coal-mining regulations. Prior to the Division's approval of proposed change, the Permittee must provide the following information, in accordance with:

R645-301-121.200, -525, • The Permittee needs to clarify and consistently represent the location and extent of the potential subsidence zone or zones on Plates 3-3, 3-4A, and 3-4C. **•** The Permittee needs to clarify whether the plan is to pull or leave pillars under the escarpment on the east side of Bear Canyon in Section 30.